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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,907	03/29/2001	Kunihiro Shima	108384-00016	6983

6449 7590 07/22/2003

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EXAMINER

WILKINS III, HARRY D

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 07/22/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/787,907

Applicant(s)

SHIMA, KUNIHIRO

Examin r

Harry D Wilkins, III

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-- The MAILING DATE of this communication appears on th cov r sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 1, 4 and 5 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 May 2003 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated Sato et al (JP 09-115355).

Sato et al teach (see paragraph 23) an Ag-oxide composite material. Sato et al disclose that the material contains 1.7 at% Mg and 1.9 at% Ni. This equates to about 0.39 wt% Mg and about 1.06 wt% Ni. Sato et al teach (see paragraphs 15 and 16) that the alloy is subjected to internal oxidation. Sato et al teach (see paragraphs 23 and 24) that the alloy is processed into a pipe shape. Regarding the presence of other elements (Mg, Ni and NiO) in the composition of Sato et al, the present claims recite a

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composition "consisting essentially of" Ag and MgO, thus closing the composition to elements which materially affect the novel characteristics of the alloy. It is asserted that Mg, Ni and NiO do not materially affect the novel characteristics of the present alloy, and support for such assertion can be found throughout the present specification, especially Table 1 on page 11. Specifically, examples 3 and 4 contain amounts of free Mg and Ni. The amounts of MgO and NiO present are less than the theoretical maximum of MgO and NiO, thus, some of the starting Mg and Ni are present as free metal and have not been reacted to form oxides. Therefore, Sato et al's Ag-oxide composite material anticipates the claimed composite material.

Regarding the process limitation of internal oxidation at 3-10 atm at 700-800°C, the claim is a product-by-process claim and any art that discloses the same product anticipates the claim, even if made by a materially different process.

"Even though product - by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product - by - process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe , 227 USPQ 964, 966 (Fed. Cir. 1985)

Applicant has not shown the difference in properties that is produced by the claimed method compared to the method of the prior art. See MPEP 2113.

Regarding claim 4, Sato et al teach (see paragraphs 15, 16, 23 and 24) an alloy with 0.39 wt% Mg and 1.06 wt% Ni that is subjected to internal oxidation and is in the shape of a pipe. Regarding the presence of other elements (Mg and Ni) in the composition of Sato et al, the present claims recite a composition "consisting essentially of" Ag, MgO and NiO, thus closing the composition to elements which materially affect the novel characteristics of the alloy. It is asserted that Mg and Ni do not materially

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affect the novel characteristics of the present alloy, and support for such assertion can be found throughout the present specification, especially Table 1 on page 11.

Specifically, examples 3 and 4 contain amounts of free Mg and Ni. The amounts of MgO and NiO present are less than the theoretical maximum of MgO and NiO, thus, some of the starting Mg and Ni are present as free metal and have not been reacted to form oxides. Regarding the process limitation of internal oxidation at 3-10 atm at 700-800°C, the claim is a product-by-process claim and any art that discloses the same product anticipates the claim, even if made by a materially different process.

Regarding claim 5, Sato et al teach (see paragraphs 23 and 24) that the alloy is processed into a pipe shape.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tenbrink (JP 06-045132) in view of Applicant's admission of prior art.

Tenbrink teaches (see claim 2 and paragraph 7) an Ag-oxide composite material. Tenbrink discloses that the material contains 0.1-0.25 wt%, in terms of elemental metal, of an oxide of Mg and 0.1-0.25 wt%, in terms of elemental metal, of an oxide of Ni. Tenbrink teach (see paragraph 7) that the alloy is subjected to dispersion hardening by oxidation. Regarding the presence of other elements (Mg, Ni and NiO) in the

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composition of Sato et al, the present claims recite a composition "consisting essentially of" Ag and MgO, thus closing the composition to elements which materially affect the novel characteristics of the alloy. It is asserted that Mg, Ni and NiO do not materially affect the novel characteristics of the present alloy, and support for such assertion can be found throughout the present specification, especially Table 1 on page 11.

Specifically, examples 3 and 4 contain amounts of free Mg and Ni. The amounts of MgO and NiO present are less than the theoretical maximum of MgO and NiO, thus, some of the starting Mg and Ni are present as free metal and have not been reacted to form oxides.

Regarding the process limitation of internal oxidation at 3-10 atm at 700-800°C, the claim is a product-by-process claim and any art that discloses the same product teaches the claimed product, even if made by a materially different process.

However, Tenbrink does not teach that the material is a "pipe" or a "tape" Ag alloy for use in a process of treating a superconductive material.

Applicant admits as prior art (see pages 2, lines 4-12 of the specification) that auxiliary material for use with a superconductive material is formed into a tape or pipe and then a multi-layered composite structure is formed. Applicant admits (see page 3, lines 10-18) as prior art that Ag-metal oxide composites have been used as a superconductor auxiliary material.

Therefore, it would have been obvious to one of ordinary skill in the art to have utilized the Ag-metal oxide composite material of Tenbrink for the superconductor auxiliary material in the conventional shape of a tape or pipe because the material of

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Tenbrink provides an alloy with a coefficient of thermal expansion matched for use with a ceramic compound wire rod (see paragraph 5).

Regarding claim 4, Tenbrink teaches (as above) a composition with 0.1-0.25 wt% MgO and 0.1-0.25 wt% NiO. Regarding the presence of other elements (Mg and Ni) in the composition of Sato et al, the present claims recite a composition "consisting essentially of" Ag, MgO and NiO, thus closing the composition to elements which materially affect the novel characteristics of the alloy. It is asserted that Mg and Ni do not materially affect the novel characteristics of the present alloy, and support for such assertion can be found throughout the present specification, especially Table 1 on page 11. Specifically, examples 3 and 4 contain amounts of free Mg and Ni. The amounts of MgO and NiO present are less than the theoretical maximum of MgO and NiO, thus, some of the starting Mg and Ni are present as free metal and have not been reacted to form oxides. Regarding the process limitation of internal oxidation at 3-10 atm at 700-800°C, the claim is a product-by-process claim and any art that discloses the same product teaches the claimed product, even if made by a materially different process.

Regarding claim 5, it would have been obvious to one of ordinary skill in the art to have utilized the Ag-metal oxide composite material of Tenbrink for the superconductor auxiliary material in the conventional shape of a pipe because the material of Tenbrink provides an alloy with a coefficient of thermal expansion matched for use with a ceramic compound wire rod (see paragraph 5).

Response to Arguments

7. Applicant's arguments filed 21 May 2003 have been fully considered but they are not persuasive. Applicant argued that the prior art alloys were not treated by the presently claimed method and did not produce the prevention of breaks that is produced by this method.

In response to Applicant's argument, Applicant has not demonstrated that the different processing conditions produce different results. Conclusory statements are not probative unless supported by facts. See *Ex parte Gray* 10 USPQ 2d 1922 (BPAI 1989); *In re deBlauwe* 222 USPQ 191, 196 (Fed. Cir. 1984); *In re D'Ancicco* 172 USPQ 241 (CCPA 1972); *In re Grunwell* 203 USPQ 1055 (CCPA 1979); *Meitzner v. Mindick* 193 USPQ 17; *In re Brandstandter* 179 USPQ 286, 294 (CCPA 1973); *In re Lindner* 173 USPQ 356; and, *In re Smith* 74 USPQ 207. Applicant should submit evidence showing the asserted improvement, comparing the treatment at 3-10 atm as claimed with the prior art methods at ambient conditions (~1 atm).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D Wilkins, III whose telephone number is 703-305-9927. The examiner can normally be reached on M-Th 10:00am-8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Harry D Wilkins, III
Examiner
Art Unit 1742

hdw
July 17, 2003


ROY KING
SUPERVISORY PATENT EXAMINER
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